Amendments to the Claims

Please cancel Claims 29 and 35. Please amend Claims 23, 24, 25, 28, 30, 33-34, 36 and 38-42. The Claim Listing below will replace all prior versions of the claims in the application:

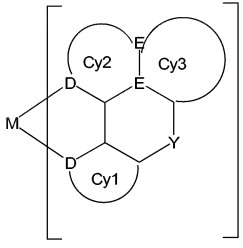
Claim Listing

1-22. (Cancelled)

23. (Currently amended) A compound of the formula (1)

$$M(L)_n(L')_m(L'')_o \quad (1),$$

wherein a part-structure $M(L)_n$ is described by formula (2)



(2),

wherein the symbols and indices used are:

M at each instance is a transition metal ion;

Y is the same or different at each instance and is ~~BR^1, CR_2,~~ $C(R^1)_2$, C=O, $C=NR^1$, ~~$C=CR_2$, $C=C(R^1)_2$ SiR^1_2, NR^1, PR^1, AsR^1, SbR^1, BiR^1, $P(O)R^1$, $P(S)R^1$, $P(Se)R^1$, $As(O)R^1$, $As(S)R^1$, $As(Se)R^1$, $Sb(O)R^1$, $Sb(S)R^1$, $Sb(Se)R^1$, $Bi(O)R^1$, $Bi(S)R^1$, $Bi(Se)R^1$, O, S, Se, Te, SO, SeO, TeO, SO_2, SeO_2, TeO_2~~ or a single bond;

D ~~is the same or different at each instance and~~ is a carbon atom in Cy1 ~~or a heteroatom with a nonbonding electron pair which coordinates to the metal, with~~

~~the proviso that one D per ligand is a carbon atom and the other is a heteroatom with a nonbonding electron pair~~ and a nitrogen atom in Cy2;

E for each occurrence is C ~~the same or different at each instance and is C or N, with the proviso that at least one symbol E is C~~;

Cy1 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered monocyclic aryl ring ~~homo- or heterocycle~~ which is bonded to the metal M via an atom D and which also has a single bond to the part-cycle Cy2 and a single bond to the Y group;

Cy2 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered heteroaryl ring ~~part-homo- or heterocycle~~ which is bonded via an atom D to the metal M and which also has a single bond to the cycle Cy1 and a common edge with the part-cycle Cy3;

Cy3 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered monocyclic aryl ring ~~part-homo- or heterocycle~~ which has a single bond to the Y group and a common edge with the part-cycle Cy2;

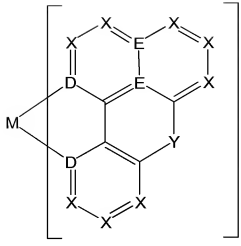
R^1 is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

n is 1, 2 or 3;

L' and L" are monoanionic, bidentate chelating ligands, and

m and o are the same or different at each instance and are 0, 1 or 2.

24. (Currently amended) A compound as claimed in claim 23, comprising a part-structure $M(L)_n$ described by the formula (2a):



(2a),

wherein:

M is Mo, W, Re, Ru, Os, Rh, Ir, Pd, Pt or Au;

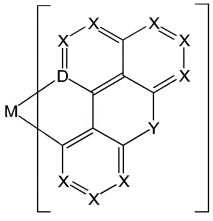
D is the same or different at each instance and is a carbon atom, or a nitrogen atom or a phosphorus atom, with the proviso that one D is a carbon atom and the other D is a nitrogen atom or a phosphorus atom;

X is ~~the same or different at each instance and is~~ CR~~, N or P; or one or more X-X units are NR, S or O; or one X-X unit in the fused part-cycles Cy2 and Cy3 is CR, N or P if one of the symbols E is N~~;

~~E is~~ C ~~the same or different at each instance and is C or N, with the proviso that at least one symbol E is C and also with the proviso that precisely one X-X unit in the fused part-cycles Cy2 and Cy3 is CR, N or P if one symbol E is N;~~

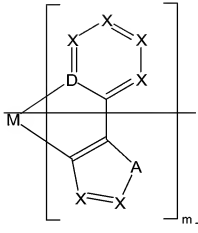
R is the same or different at each instance and is H, F, Cl, Br, I, OH, NO_2, CN, a straight-chain, branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, where one or more nonadjacent CH_2 groups may be replaced by $-R^1C{=}CR^1-$, $-C{\equiv}C-$, $Si(R^1)_2$, $Ge(R^1)_2$, $Sn(R^1)_2$, $-O-$, $-S-$, $-NR^1-$, $-(C{=}O)-$, $-(C{=}NR^1)-$, $-P{=}O(R^1)-$ or $-CONR^1-$ and where one or more hydrogen atoms may be replaced by F, or an aryl, heteroaryl, aryloxy or heteroaryloxy group which has from 1 to 14 carbon atoms and may be substituted by one or more nonaromatic R radicals, where a plurality of substituents R, both on the same ring and on different rings, may in turn form a further mono- or polycyclic, aliphatic or aromatic ring system.

25. (Currently amended) A compound of claim 24, comprising at least one part-structure $M(L)_n$ of the formula (2b), identical or different at each instance,

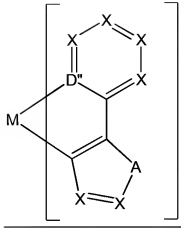


(2b),

and further optionally comprising a part-structure $M(L')_m$ of the formula [[(3)]] (3a), identical or different at each instance



~~(3),~~



(3a),

wherein:

~~D is the same or different at each instance and is N or P; and~~

D" is the same or different at each instance and is N or P; and

A is the same or different at each instance and is -CR=CR-, -N=CR-, -P=CR-, -N=N-, -P=N-, NR, PR, O, S, Se.

26. (Previously presented) A compound of claim 25, wherein M is Rh, Ir, Pd or Pt.

27. (Previously presented) A compound of claim 26, wherein n is 2 or 3.

28. (Currently amended) A compound of claim 27, wherein [[D]] D" is N.

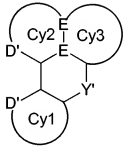
29. (Cancelled)

30. (Currently amended) A compound of claim [[29]] 28, wherein Y is CR_2, C=O, $C=CR_2$, ~~NR^1, PR^1, $P(O)R^1$, O, S, SO, SO_2~~ or a single bond.

31. (Previously presented) A compound of claim 30, wherein R is the same or different at each instance and is H, F, a straight-chain, branched or cyclic alkyl or alkoxy group having from 1 to 4 carbon atoms, where one or more hydrogen atoms may be replaced by F, or an aryl or heteroaryl group which has from 1 to 6 carbon atoms and may be substituted by one or more nonaromatic R radicals, where a plurality of substituents R, both on the same ring and on different rings, together may in turn form a further aliphatic or aromatic, mono- or polycyclic ring system.

32. (Previously presented) A compound of claim 31, wherein Y is a spiro carbon atom.

33. (Currently amended) A compound of the formula (4)



(4),

wherein:

E for each occurrence is C ~~the same or different at each instance and is C or N, with the proviso that at least one symbol E is C~~;

Cy1 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered monocyclic aryl ring ~~homo- or heterocycle~~ which is bonded to the metal M via an atom D and which also has a single bond to the part-cycle Cy2 and a single bond to the Y group;

Cy2 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered heteroaryl ring ~~part-homo- or- heterocycle~~ which is bonded via an atom D to the metal M and which also has a single bond to the cycle Cy1 and a common edge with the part-cycle Cy3;

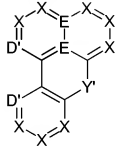
Cy3 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered monocyclic aryl ring ~~part-homo- or heterocycle~~ which has a single bond to the Y group and a common edge with the part-cycle Cy2;

Y´ is the same or different at each instance and is ~~BR^1, CR_2,~~ $C(R^1)_2$, $C{=}NR^1$, ~~$C{=}CR_2$,~~ or ~~$C{=}C(R^1)_2$, SiR^1_2, PR^1, AsR^1, SbR^1, BiR^1, $P(O)R^1$, $P(S)R^1$, $P(Se)R^1$, $As(O)R^1$, $As(S)R^1$, $As(Se)R^1$, $Sb(O)R^1$, $Sb(S)R^1$, $Sb(Se)R^1$, $Bi(O)R^1$, $Bi(S)R^1$, $Bi(Se)R^1$, Se, SO, SeO, TeO, SO_2, SeO_2, TeO_2;~~

D‘ ~~is the same or different at each instance and is C-H, N or P, with the proviso that one symbol D' is C-H and the other symbol D' is N or P~~ is a carbon atom in Cy1 and a nitrogen atom in Cy2; and

R^1 is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms.

34. (Currently amended) A compound of claim 33, represented by formula (4a):



(4a)

wherein:

X is CR;

R is the same or different at each instance and is H, F, Cl, Br, I, OH, NO_2, CN, a straight-chain, branched or cyclic alkyl or alkoxy group having from 1 to 20 carbon atoms, where one or more nonadjacent CH_2 groups may be replaced by $-R^1C{=}CR^1-$, $-C{\equiv}C-$, $Si(R^1)_2$, $Ge(R^1)_2$, $Sn(R^1)_2$, $-O-$, $-S-$, $-NR^1-$, $-(C{=}O)-$, $-(C{=}NR^1)-$, $-P{=}O(R^1)-$ or $-CONR^1-$ and where one or more hydrogen atoms may be replaced by F, or an aryl, heteroaryl, aryloxy or heteroaryloxy group which has from 1 to 14 carbon atoms and may be substituted by one or more nonaromatic R radicals, where a plurality of substituents R, both on the same ring and on

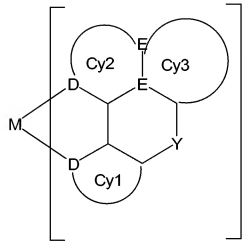
different rings, may in turn form a further mono- or polycyclic, aliphatic or aromatic ring system.

35. (Cancelled)

36. (Currently amended) A process for preparing compound of the formula (1)

$$M(L)_n(L')_m(L'')_o \quad (1),$$

wherein a part-structure $M(L)_n$ is described by formula (2)



(2),

wherein the symbols and indices used are:

M at each instance is a transition metal ion;

Y is the same or different at each instance and is ~~BR^+, CR_2,~~ $C(R^1)_2$, C=O, $C=NR^1$, ~~$C=CR_2$,~~ $C=C(R^1)_2$, ~~SiR^+_2, NR^+, PR^+, AsR^+, SbR^+, BiR^+, $P(O)R^+$, $P(S)R^+$, $P(Se)R^+$, $As(O)R^+$, $As(S)R^+$, $As(Se)R^+$, $Sb(O)R^+$, $Sb(S)R^+$, $Sb(Se)R^+$, $Bi(O)R^+$, $Bi(S)R^+$, $Bi(Se)R^+$, O, S, Se, Te, SO, SeO, TeO, SO_2, SeO_2, TeO_2~~ or a single bond;

D ~~is the same or different at each instance and~~ is a carbon atom in Cy1 ~~or a heteroatom with a nonbonding electron pair which coordinates to the metal, with the proviso that one D per ligand is a carbon atom and the~~

~~other is a heteroatom with a nonbonding electron pair~~ and a nitrogen atom in Cy2;

E for each occurrence is ~~C the same or different at each instance and is C or N, with the proviso that at least one symbol E is C~~;

Cy1 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered monocyclic aryl ring ~~homo- or heterocycle~~ which is bonded to the metal M via an atom D and which also has a single bond to the part-cycle Cy2 and a single bond to the Y group;

Cy2 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered heteroaryl ring ~~part-homo- or heterocycle~~ which is bonded via an atom D to the metal M and which also has a single bond to the cycle Cy1 and a common edge with the part-cycle Cy3;

Cy3 is the same or different at each instance and is a ~~saturated, unsaturated or aromatic~~ six-membered monocyclic aryl ring ~~part-homo- or heterocycle~~ which has a single bond to the Y group and a common edge with the part-cycle Cy2;

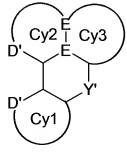
R^1 is the same or different at each instance and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

n is 1, 2 or 3;

L' and L" are monoanionic, bidentate chelating ligands, and

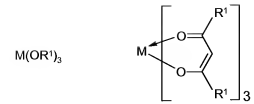
m and o are the same or different at each instance and are 0, 1 or 2.

by reacting a compound of the formula (4)



(4),

with metal alkoxides of formula (5), with metal ketoketonates of the formula (6) or mono- or polycyclic metal halides of the formula (7), (8) and (9)



Formula (5) Formula (6) Formula (7)

Formula (8) Formula (9)

and further wherein:

D‘ ~~is the same or different at each instance and is C-H, N or P, with the proviso that one symbol D‘ is C-H and the other symbol D‘ is N or P~~ is a carbon atom in Cy1 and a nitrogen atom in Cy2;

p is 1 or 2; and

Hal is F, Cl, Br or I.

37. (Previously presented) A process of Claim 36, wherein a compound of formula (4) is reacted with iridium compounds which bear both alkoxide and/or halide and/or hydroxyl and ketoketonate radicals.

38. (Currently amended) A compound of claim [[1]] 23, wherein purity of said compound determined by means of ^{1}H NMR and/or HPLC is more than 99%.

39. (Currently amended) A conjugated, part-conjugated or nonconjugated polymer or dendrimer containing one or more of the compounds as claimed in claim [[1]] 23.

40. (Currently amended) A conjugated, part-conjugated or nonconjugated polymer or dendrimer containing one or more of the compounds as claimed in claim [[2]] 24, wherein at least one R is a bond to the polymer or dendrimer.

41. (Currently amended) A polymer as claimed in claim 39, ~~characterized in that~~ wherein the polymer is selected from the group of polyfluorenes, polyspirobifluorenes, polyparaphenylenes, polycarbazoles, polyvinylcarbazoles, polythiophenes, polyketones or copolymers thereof.

42. (Currently amended) An electronic component comprising at least one compound as claimed in claim [[1]] 23.

43. (Previously presented) The electronic component of claim 42, wherein said component is an organic light-emitting diode (OLED), an organic integrated circuit (O-IC), an organic field-effect transistor (O-FET), an organic thin-film transistor (O-TFT), an organic solar cell (O-SC) or an organic laser diode (O-laser).